CLAIMS:

1. A system comprising:

a programming device to control delivery of neurostimulation by an implantable neurostimulator implanted within a patient during a programming session; and

a server connected to the programming device via a network during the programming session, wherein the server directs the programming device to control the implantable neurostimulator to deliver neurostimulation according to a plurality of programs during the programming session, receives rating information for each of the programs via the programming device, the rating information for each of the delivered programs relating to the efficacy of that program, and presents the rating information to a clinician via the programming device to assist the clinician in selection of one or more of the programs for long-term programming of the implantable neurostimulator.

2. The system of claim 1, wherein the server receives parameters for each of the programs from the clinician via the programming device, the parameters for each of the programs defining neurostimulation delivered according to that program.

3. The system of claim 1, wherein the server randomly orders the programs and directs the programming device to control the implantable neurostimulator to deliver neurostimulation according to the random ordering of the programs.

4. The system of claim 1, wherein the rating information comprises a numerical score for each of the programs, the numerical scores entered into the programming device by at least one of the patient and the clinician.

5. The system of claim 1, wherein the server receives input from at least one of the patient and the clinician via the programming device indicating an area of pain perceived by the patient, receives an input from at least one of the patient and the clinician via the programming device for each of the programs that indicates an area of paresthesia experienced by the patient during delivery of neurostimulation according to the respective

program, compares the area of paresthesia for each of the programs to the area of pain to determine an amount of overlap for each of the programs, and presents the amounts of overlap for each of the programs to the clinician as rating information.

6. The system of claim 5, wherein the programming device includes a display and displays a first body template and additional body templates via the display, each of the additional body templates displayed after delivery of neurostimulation according to a respective one of the programs by the implantable neurostimulator, the body templates illustrating an external surface of a human body, and

wherein the server receives information from the programming device via the network that describes regions of the body templates identified by at least one of the patient and the clinician, and compares regions to determine the amounts of overlap.

7. The system of claim 6, wherein the display of the programming device is a touch screen display, and the at least one of the patient and the clinician identifies a region of one of the body templates by manipulating a stylus on the display while that body template is displayed.

8. The system of claim 1, further comprising a database, wherein the server receives a selection made by the clinician of one of the programs via the programming device, and stores the selected program and associated rating information within the database as part of a record for the patient.

9. The system of claim 8, wherein the clinician selects the program for long-term programming of the implantable neurostimulator, and the server directs the programming device to program the implantable neurostimulator with the selected program.

10. The system of claim 8, wherein the server receives patient information and device configuration information via the programming device and stores the patient information and device configuration information within the database are part of the record for the patient, the patient information including at least one of symptoms, age, height, weight, and sex, and the

device configuration information including at least one of a device type, a number of leads, a number of electrodes, a configuration of electrodes and positions of electrodes.

11. The system of claim 10,

wherein the database stores programs, rating information, patient information, and device configuration information for a plurality of patients received from a plurality of programming devices, and

wherein the server receives a query from the clinician via the programming device, analyzes at least some of the programs and information stored in the database, and provides a result of the analysis to the clinician in response to the query.

12. The system of claim 11, wherein the server suggests at least one program to the clinician via the programming device based on the analysis.

13. The system of claim 12, wherein the server provides a statistic associated with the program to the clinician via the network and the programming device.

14. The system of claim 11, wherein the server receives at least one of patient information and device configuration information as part of the query, and compares the received at least one of patient information and device configuration information to at least one of the patient information and device configuration information stored within the database.

15. The system of claim 8, wherein the programming device is a clinician programmer, the system further comprising a patient programmer connectable to the server via the network, and

wherein the server receives rating information from a patient programmer via the network, and stores the rating information within the database as part of the record.

16. The system of claim 8, further comprising a computing device connectable to the server via the network, wherein the server receives a query via the computing device and provides information stored in the database to the computing device in response to the query.

17. The system of claim 1, wherein the network comprises at least one of a local area network, wide area network, the Internet, a cellular telephone network, and a landline telephone network.

18. The system of claim 1, wherein the programming device comprises a hand-held computing device.

19. A method comprising:

directing a programming device via a network to control an implantable neurostimulator to deliver neurostimulation according to a plurality of programs during a programming session, the implantable neurostimulator implanted within a patient;

receiving rating information for each of the programs via the programming device and the network, the rating information for each of the delivered programs relating to the efficacy of that program; and

presenting the rating information to a clinician via the network and the programming device to assist the clinician in selection of one or more of the programs for long-term programming of the implantable neurostimulator.

20. The method of claim 19, further comprising receiving parameters for each of the programs from the clinician via the programming device and the network, the parameters for each of the programs defining neurostimulation delivered according to that program.

21. The method of claim 19, further comprising randomly ordering the programs, wherein directing the programming device comprises directing the programming device to control the implantable neurostimulator to deliver neurostimulation according to the random ordering of the programs.

22. The method of claim 19, wherein receiving rating information comprises receiving a numerical score for each of the programs, the numerical scores entered into the programming device by at least one of the patient and the clinician.

23. The method of claim 19, wherein receiving rating information comprises:

receiving input from at least one of the patient and the clinician via the programming device and the network indicating an area of pain perceived by the patient;

receiving an input from at least one of the patient and the clinician via the programming device and the network for each of the programs that indicates an area of paresthesia experienced by the patient during delivery of neurostimulation according to the respective program; and

comparing the area of paresthesia for each of the programs to the area of pain to determine an amount of overlap for each of the programs, and

wherein presenting the rating information comprises presenting the amounts of overlap for each of the programs to the clinician.

24. The method of claim 23, wherein the programming device displays a first body template and additional body templates, each of the additional body templates displayed after delivery of neurostimulation according to a respective one of the programs, the body templates illustrating an external surface of a human body,

wherein receiving inputs indicating an area of pain and areas of paresthesia comprises receiving information from the programming device via the network that describes regions of the body templates identified by at least one of the patient and the clinician, and

wherein comparing the areas to determine an amount of overlap comprises comparing regions.

25. The method of claim 19, further comprising:

receiving a selection made by the clinician of one of the programs via the programming device and the network; and

storing the selected program and associated rating information within a database as part of a record for the patient.

26. The method of claim 25, wherein the clinician selects the program for long-term programming of the implantable neurostimulator, the method further comprising directing the programming device to program the implantable neurostimulator with the selected program.

27. The method of claim 26, further comprising:

receiving patient information and device configuration information via the programming device and the network, wherein the patient information includes at least one of symptoms, age, height, weight, and sex, and the device configuration information includes at least one of a device type, a number of leads, a number of electrodes, a configuration of electrodes and positions of electrodes; and

storing the patient information and device configuration information within the database as part of the record for the patient.

28. The method of claim 27, further comprising:

storing programs, rating information, patient information, and device configuration information for a plurality of patients received from a plurality of programming devices within the database;

receiving a query from the clinician via the programming device;

analyzing at least some of the programs and information stored in the database; and

providing a result of the analysis to the clinician via the programming device in response to the query.

29. The method of claim 28, wherein providing a result comprises suggesting at least one program to the clinician via the network and the programming device based on the analysis.

30. The method of claim 29, wherein suggesting a program for neurostimulation therapy comprises providing a statistic associated with the program to the clinician via the network and the programming device.

31. The method of claim 28, wherein receiving a query comprises receiving at least one of patient information and device configuration information, and analyzing at least some of the programs and information stored in the database comprises comparing the received at least one of patient information and device configuration information to at least one of the patient information and device configuration information stored within the database.

32. The method of claim 25, wherein the programming device is a clinician programmer, the method further comprising:

receiving rating information from a patient programmer via the network; and

storing the rating information within the database as part of the record.

33. The method of claim 25, further comprising:

receiving a query from a computing device via the network; and

providing information from the database to the computing device via the network in response to the query.

34. A computer-readable medium comprising instructions that cause a programmable processor to:

direct a programming device via a network to control an implantable neurostimulator to deliver neurostimulation according to a plurality of programs during a programming session, the implantable neurostimulator implanted within a patient;

receive rating information for each of the programs via the programming device and the network, the rating information for each of the delivered programs relating to the efficacy of that program; and

present the rating information to a clinician via the network and the programming device to assist the clinician in selection of one or more of the programs for long-term programming of the implantable neurostimulator.

35. The computer-readable medium of claim 34, further comprising instructions that cause a programmable processor to receive parameters for each of the programs from the

clinician via the programming device and the network, the parameters for each of the programs defining neurostimulation delivered according to that program.

36. The computer-readable medium of claim 34, further comprising instructions that cause a programmable processor to randomly order the programs, wherein the instructions that cause a programmable processor to direct the programming device comprise instructions that cause a programmable processor to direct the programming device to control the implantable neurostimulator to deliver neurostimulation according to the random ordering of the programs.

37. The computer-readable medium of claim 34, wherein the instructions that cause a programmable processor to receive rating information comprise instructions that cause a programmable processor to receive a numerical score for each of the programs, the numerical scores entered into the programming device by at least one of the patient and the clinician.

38. The computer-readable medium of claim 34, wherein the instructions that cause a programmable processor to receive rating information comprise instructions that cause a programmable processor to:

receive input from at least one of the patient and the clinician via the programming device and the network indicating an area of pain perceived by the patient;

receive an input from at least one of the patient and the clinician via the programming device and the network for each of the programs that indicates an area of paresthesia experienced by the patient during delivery of neurostimulation according to the respective program; and

compare the area of paresthesia for each of the programs to the area of pain to determine an amount of overlap for each of the programs, and

wherein the instructions that cause a programmable processor to present the rating information comprise instructions that cause a programmable processor to present the amounts of overlap for each of the programs to the clinician.

39. The computer-readable medium of claim 38, wherein the programming device displays a first body template and additional body templates, each of the additional body templates displayed after delivery of neurostimulation according to a respective one of the programs, the body templates illustrating an external surface of a human body,

wherein the instructions that cause a programmable processor to receive inputs indicating an area of pain and areas of paresthesia comprise instructions that cause a programmable processor to receive information from the programming device via the network that describes regions of the body templates identified by at least one of the patient and the clinician, and

wherein the instructions that cause a programmable processor to compare the areas to determine an amount of overlap comprise instructions that cause a programmable processor to compare regions.

40. The computer-readable medium of claim 34, further comprising instructions that cause a programmable processor to:

receive a selection made by the clinician of one of the programs via the programming device and the network; and

store the selected program and associated rating information within a database as part of a record for the patient.

41. The computer-readable medium of claim 40, wherein the clinician selects the program for long-term programming of the implantable neurostimulator, the medium further comprising instructions that cause a programmable processor to direct the programming device to program the implantable neurostimulator with the selected program.

42. The computer-readable medium of claim 41, further comprising instructions that cause a programmable processor to:

receive patient information and device configuration information via the programming device and the network, wherein the patient information includes at least one of symptoms, age, height, weight, and sex, and the device configuration information includes

at least one of a device type, a number of leads, a number of electrodes, a configuration of electrodes and positions of electrodes; and

store the patient information and device configuration information within the database as part of the record for the patient.

43. The computer-readable medium of claim 40, further comprising instructions that cause a programmable processor to:

store programs, rating information, patient information, and device configuration information for a plurality of patients received from a plurality of programming devices within the database;

receive a query from the clinician via the programming device;

analyze at least some of the programs and information stored in the database; and

provide a result of the analysis to the clinician via the programming device in response to the query.

44. The computer-readable medium of claim 43, wherein the instructions that cause a programmable processor to provide a result comprises instructions that cause a programmable processor to suggest at least one program to the clinician via the network and the programming device based on the analysis.

45. The computer-readable medium of claim 44, wherein the instructions that cause a programmable processor to suggest a program for neurostimulation therapy comprise instructions that cause a programmable processor to provide a statistic associated with the program to the clinician via the network and the programming device.

46. The computer-readable medium of claim 43, wherein the instructions that cause a programmable processor to receive a query comprise instructions that cause a programmable processor to receive at least one of patient information and device configuration information, and wherein the instructions that cause a programmable processor to analyze at least some of the programs and information stored in the database comprise instructions that cause a programmable processor to compare the received at least one of patient information and

device configuration information to at least one of the patient information and device configuration information stored within the database.

47. The computer-readable medium of claim 40, wherein the programming device is a clinician programmer, the medium further comprising instructions that cause a programmable processor to:

receive rating information from a patient programmer via the network; and

store the rating information within the database as part of the record.

48. The computer-readable medium of claim 40, further comprising instructions that cause a programmable processor to:

receive a query from a computing device via the network; and

provide information from the database to the computing device via the network in response to the query.